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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,206	08/25/2000	Gordon Bremer	061607-1300	4403

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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP
100 GALLERIA PARKWAY, NW
STE 1750
ATLANTA, GA 30339-5948

EXAMINER	
BARNIE, REXFORD N	

ART UNIT	PAPER NUMBER
2643	6

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/645,206	BREMER ET AL.	
	Examiner	Art Unit	
	REXFORD N BARNIE	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *12/29/2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

RBarnie

REXFORD BARNIE
PRIMARY EXAMINER

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5*.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claims 1-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art (see fig. 2) in view of {Sciacero et al. (US Pat# 5,502,391) or Arnett et al. ('834 or '742)} and further in view of Agazzi et al. (US Pat# 4,669,116).

Regarding claims 1 and 37, Admitted prior art of record teaches a digital communication wherein mutual coupling can cause crosstalk and fails to teach a cross-talk compensation circuit made of capacitive means as a form of reducing crosstalk. Reducing crosstalk is notoriously well known.

Sciacero et al. teaches an apparatus for measuring the crosstalk in a cable associated with a network by using capacitive circuit for the purpose of reducing crosstalk caused by coupling effect in (see fig. 3B, col. 3 lines 12-17, col. 5).

Arnett teaches a capacitive crosstalk compensation arrangement for communication connectors wherein a capacitive circuit can be used in preventing cross-talk caused by mutual coupling associated with a plurality of conductors in (see fig. 6

and disclosure of '742). Also, '834 teaches a connector which provides a crosstalk compensation by means of a capacitive circuit in (see fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sciacero or Arnett by providing a crosstalk compensator to which communication devices can be connected to reduce crosstalk coupling and to enhance clarity of signals by reducing noise.

The combination fails to teach selectively coupling by means of a relay or switch to the capacitive circuit.

Agazzi teaches a non-linear cancellation of signals including echo or cross-talk in conjunction with data signals in (see col. 1 lines 17-20) by using a capacitive circuit with a plurality of capacitors in parallel which can be activated by means of a relay in conjunction with a controller in (see fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Agazzi into that of the combination thus making it possible to activate a crosstalk circuit to prevent noise or interference with a desired signal.

Regarding claims 2-32, 33-36 and 38-47, The combination teaches being able to use a plurality of capacitors in parallel in reducing crosstalk and would have been obvious to one of ordinary skill to use any functional equivalent capacitive means. Furthermore, the combination for instance Agazzi teaches a plurality of capacitors in parallel under control of a control logic which can activate a capacitors by means of a

relay. Crosstalk as defined and well known would be reduced if not canceled by the capacitive circuit taught by the combination.

Regarding claims 33, Admitted prior art of record teaches a digital communication wherein mutual coupling can cause crosstalk and fails to teach a cross talk compensation circuit made of capacitive means as a form of reducing crosstalk. Reducing crosstalk is notoriously well known.

Sciacero et al. teaches an apparatus for measuring the crosstalk in a cable associated with a network by using capacitive circuit for the purpose of reducing crosstalk caused by coupling effect in (see fig. 3B, col. 3 lines 12-17, col. 5).

Arnett teaches a capacitive crosstalk compensation arrangement fro communication connectors wherein a capacitive circuit can be used in preventing cross-talk caused by mutual coupling associated with a plurality of conductors in (see fig. 6 and disclosure of '742). Also, '834 teaches a connector which provides a crosstalk compensation by means of a capacitive circuit in (see fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sciacero or Arnett by providing a crosstalk compensator to which communication devices can be connected to reduce crosstalk coupling and to enhance clarity of signals by reducing noise.

The combination fails to teach selectively coupling by means of a relays or switches to the capacitive circuit.

Agazzi teaches a non-linear cancellation of signals including echo or cross-talk in conjunction with data signals in (see col. 1 lines 17-20) by using a capacitive circuit with

a plurality of capacitors in parallel which can be activated by means of a relay in conjunction with a controller in (see fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Agazzi into that of the combination thus making it possible to activate a crosstalk circuit to prevent noise or interference with a desired signal. Note that the combination including Agazzi teaches a crosstalk circuit which includes a four conductors system in conjunction with relays.

Regarding claim 48, see the explanation as set forth regarding claim 1 because the system would perform the method steps.

Regarding claims 49-61, see the explanation as set forth regarding claims 2-32, 33-36, 38-47.

Regarding claim 62, see the explanation as set forth regarding claim 1 because the system would perform the method steps by using a computer readable medium.

Regarding claims 63-65, see the explanation as set forth regarding claims 2-32, 33-36, 38-47.

Response to Arguments

Applicant's arguments filed on 12/19/2003 have been fully considered but they are not persuasive.

The applicant argued that the combination including Agazzi fails to render the claimed subject matter as set forth in the rejection of the claimed subject matter.

The examiner disagrees because the examiner would like to point out and re-iterate the explanation as set forth in the rejection of the claimed subject matter

including the fact that Agazzi teaches a means which can be used to remove near end cross-talk or echo signal including that of (fig. 3 and col. 1 lines 17-21) which uses a plurality of relays in conjunction with capacitors which would be selectively activated either to close or open, by nature the functionality of a switch relay. Furthermore, even though, not applied, a secondary reference applied Sciacero et al. teaches a crosstalk compensation system wherein capacitors in conjunction with relay switches can be used in reducing crosstalk in (see col. 5, figs.).

Therefore, the able to reduce crosstalk using capacitors coupled to relay switches or switches are indeed rendered obvious by the combination as set forth in the rejection of the claimed subject matter.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is (703)306-2744. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on (703) 305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER
REXFORD BARNIE
03/30/04

REXFORD BARNIE
PRIMARY EXAMINER